

**PRODUCT PERFORMANCE / EFFICACY REVIEW**

Mark Suarez, Entomologist - IB

*Mark E. S.*  
20 DECEMBER 2006

**DATE:** 19 December 2006

**EPA REG. NUMBER:** 9688-217

**PRODUCT NAME:** Chemsico Insect Bait 161

**REGISTRANT:** Chemsico

**PM:** John Hebert, PM07  
**REVIEWER:** Geri McCann

**DECISION #.:** 369600  
**DP BARCODE:** 335059

**ACTION:** R34

**ACTIVE INGREDIENT(S):** 067710, Indoxacarb.....0.016%

**TYPE:** Granular Fire Ant Bait

**OPPTS GUIDELINE(S):** 810.1000  
810.3000  
810.3100

**MRID:** 46932301

**GLP ?:** No.

**SITES:** Outdoor Premise

**PESTS:** Fire Ants

**STUDY APPLICATION RATE:** 0.5 lb/1000 ft<sup>2</sup>

**LABEL APPLICATION RATE:** Mound: 4 tablespoons around mound  
Broadcast: 0.5 lb/1000 ft<sup>2</sup>



## STUDY SUMMARY:

**MRID 46932301.** Duckworth, C. (2006) Residual Efficacy of Chemsico Insect Bait 16I: Against Red Imported Fire Ants, *Solenopsis invicta* Buren. Unpublished study prepared by Pest Management International. 6 p.

The submitted study tested the effectiveness of a fire ant bait (EPA Reg. No. 9688-217, 0.016% Indoxacarb) applied as a broadcast treatment at the rate of 0.5 lbs/1000 ft<sup>2</sup> in Florida and Texas field plots 2500 ft<sup>2</sup> in area. The product was applied at the label rate via a hand-held spreader. The bait was not watered in. Treatment plots were replicated in triplicate at each site. A single control plot was run at each site. Fire ant mounds within each plot were probed to assess ant activity at 24 and 48 hours, 2, 4, 8, and 12 weeks following treatment. The activity of mounds originally identified within the plots, as well as new mound formation was noted.

The results are presented in Table 1 below.

	% Reduction in number of mounds					
Time after treatment	FL TRT	FL CTRL	TX TRT	TX CTRL	Mean TRT	Mean CTRL
24 Hours	29.2	0	35.1	0	32.2	0
48 H	90.7	0	95.8	0	93.25	0
2 Weeks	100	0	95.8	-122	97.9	0
4 W	100	0	95.8	0	97.9	0
8 W	100	- 160	95.8	0	97.9	0
12 W	100	0	95.8	0	97.9	0

Table 1. Efficaciousness of broadcast Indoxacarb bait against fire ants when applied at a rate of 0.5 lb/1000 ft<sup>2</sup>.

## ENTOMOLOGIST'S COMMENTS AND RECOMMENDATIONS:

The raw data were not provided these data need to accompany all efficacy data submissions. Submit an addendum to MRID 46932301 that includes the raw data.

The data generally support claims that the product is efficacious against fire ants when applied at the label rate for broadcast treatment (and therefore mound treatment). The data support the inclusion of claims of effectiveness up to 3 months, when the product is applied as a broadcast treatment. (Mound treatments are targeted to kill individual nests. Therefore, residual claims are not appropriate for mound treatments. One a colony has been killed, no residual activity is required.)

### General comments:

1. Claims that the product provides kill or control for "up to 3 months" are acceptable.
2. Remove claims that the product works within 48 hours to control fire ants.
3. Remove "season long" control claims. The fire ant season is 12 months in many parts of the Southern U.S.

Specific marketing claims are addressed below:

1. Under optional Marketing Language (p. 1):



- a. [Chemsico Insect Bait 161][Alternate Brand Name] granules kill the queen [in 48 hours] and provide season long control against Fire Ant Colony. Formation. Worker Fire Ants forage the bait immediately and take the granules deep into the colony to feed other Fire Ants and the Queen. [Chemsico Insect Bait 161][Alternate brand name] granules will quickly start to work, showing significant reduction of foraging Fire Ants within 24 hours and will help prevent them in your yard [for an entire season][for 3 months].
2. Optional Product Fact Box (p. 1):
  - a. Kills Fire Ant[s] [Mound][colony] and helps prevent new mounds from forming all season long
  - b. Apply in early Spring or Summer at the first sign of fire ant activity. Re-apply in the Fall to reduce the number of Fire ants that will return next spring.
3. Mound Treatment (p. 1):
  - a. [Kills the colony]
  - b. Decreased ant activity will be observed in as little as 24 hours after bait placement. Complete mound control will occur 48 hours after application.
4. Broadcast Treatment (p. 2):
  - a. Decreased ant activity will be observed in as little as 24 hours after bait placement. Complete mound control will occur 48 hours after application.
  - b. Re-apply after 12 weeks (3 months) to prevent re-infestation.
5. Use Tips (p. 2):
  - a. For best results, apply in Spring or Summer at the first sign of Fire Ant activity to prevent mounds from forming.
  - b. Treating the entire yard is recommended since it will kill foraging ants and mounds which may not be visible at the time of application.
  - c. People and pets may re-enter treated area immediately after broadcast.
6. APPENDIX, Optional Marketing Claims (p. 3):
  - a. The following claims are acceptable as expressed on the submitted label:
    - 4, 5, 7, 10, 12, 18, 31, 32, 36, 37, 38, 39, 41, 43, 44, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 60, 62
  - b. Remove the following claims (as numbered on the label dated 08/02/2006):
    - 1, 2, 3, 9, 15, 16, 19, 20, 21, 23, 24, 28, 29, 40, 48, 57, 58, 59, 61
  - c. Modify the following claims as indicated
    - (1) Specify the duration of effectiveness demonstrated, by adding "for up to 3 months" to each of the following claims:
      - 6, 8, 42

- (2) Remove season long control claims, but retain up to 3 months for the following marketing statements:
- 11, 13, 17, 22
- (3) Remove season long claims; replace with "up to 3 months[12 weeks]":
- 14
- (4) Modify the following claims as specified:
- 26: PowerBait® technology Kills Fire Ants **Fast** and lasts *up to 3 months [12 weeks]* ~~{all season long}~~~~{for an entire season}~~
  - 27: [Starts][Begins]to work in *as few[little] as* 24 hours
  - 30: Lawn control of fire ant activity in *as few[little] as* 7-14 days
  - 33: 2-in-1 Formula – 1.) Kills Fire Ants ~~{fast}~~; 2.) Keeps ~~]killing][working]~~ ~~all season long~~~~{for up to 3 months}~~
  - 34: Dual action – 1.) Kills Fire Ants ~~{fast}~~; 2.) Keeps ~~]killing][working]~~ ~~all season long~~~~{for up to 3 months}~~
  - 35: Dual Action formula – Kills Fire Ants **Fast**, Last all Season
  - 45: Kills Fire Ants **Fast**

Enclosure  
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